

"bought the system" (Tr. 1412). He said that Rusty Harrison would know more about it since Huntington was his office (Tr. 1026).

39. Raymond also testified that Capitol has had for 8 or 10 years a phone line and modem by which it is possible to dial up the paging terminal from anywhere to access it directly and perform functions and testing (Tr. 816-7). The computer system is maintained by a company in California which can use the dial up modem line to access it (Tr. 817). The remote capability also proved convenient for Bob Wilson when he was not able to come to the office daily because of illness and for a previous employee who lived 45 miles from Charleston (Tr. 817). As an alternative to calling Charleston and asking someone there to turn off the autotest, Harrison's secretary could have dialed up the modem line and turned it off herself, he said, but suggested that she did not know the number of the modem line (Tr. 1027).

40. Harrison testified that during August 1991 the autotest feature could not be controlled from Huntington; it was necessary to call Charleston and ask someone there to program the autotest and to turn it on or off (Tr. 730, 749-50, 770). Now it can be controlled from either location, he said (Tr. 730).

41. Harrison stated that he had been contacted by the Greenup County Rescue Squad, which wanted group call service to 10-15 pagers (Cap. Ex. 22, p. 2). "Group call" is also referred to as "chaining" (Tr. 697). He explained, "there was one number for the chain and you dialed the one phone number and it would go

down and set off No. 1 through No. 15" (Tr. 699). He stated that he tested the group call feature for Greenup County at various times during 1991, including in August (Cap. Ex. 22, pp. 1-4;¹² Tr. 733). He never could get the group call to work and abandoned the attempt in the fall of 1991 (Cap. Ex. 22, p. 2). The Greenup County Rescue Squad is located in Kentucky about 10-15 miles away from Huntington (Tr. 741). However, according to FCC engineer Walker, at the inspection no one mentioned the Greenup County Rescue Squad in connection with testing (Tr. 1450). Harrison claimed he tested group call for other customers but could not identify them (Tr. 738).

42. To test coverage, someone must go out in the field with a pager to wait for pages to occur and count them (Tr. 1144-5). When using the autotest feature, people are sent out in the field for a few hours, then the autotest is turned off and information gathered from the people who were in the field (Tr. 328-30). There is no reason to transmit 24 hours a day (Tr. 329). Billy McCallister, a technician employed by Capitol's service company, tests from the field using his cellular phone to call the number of the pager he is carrying (Cap. Ex. 21, p. 1; Tr. 651). Someone who wished to test a chain or group call would set the group of pagers on his desk, phone the number and wait for them to go off (Tr. 623-5).

¹² As noted supra, Cap. Ex. 22, which is Harrison's written direct testimony, reaffirms and includes his September 29, 1992, statement to the Commission under penalty of perjury (Cap. Ex. 22, pp. 2-5).

43. Capitol does not contest the claim of excessive testing (Cap. Ex. 1, p. 24; Tr. 180, 1049). In Walker's view, assuming the tones were testing, they were excessive and caused harmful interference (Tr. 1457). Indeed, according to Peters, if one person is engaged in excessive testing, not sending out pages, he would be causing interference to the other person who is trying to get out legitimate pages (Tr. 1141). Excessive testing is harmful interference (Tr. 1266).

Customers

44. At the inspection, Dan Stone, Capitol's president and owner, told the FCC engineers that Marshall University was one of the PCP's largest customers (PRB Ex. 3, p. 5; Tr. 131-2, 1450). When asked for documentation, Capitol provided customer lists indicating three to five customers with one pager number each; Marshall University was not among them (PRB Ex. 3, p. 5; PRB Ex. 5; Tr. 985-6; Tr. 1381-3). Later, in its June 17, 1992, response to a Commission inquiry, Capitol listed two customers at the time of the inspection (PRB Ex. 10; PRB Ex. 11, p. 3). Only one of the customers, J.J. Smith Painting, is a constant among the various written lists (PRB Ex. 5, pp. 1, 3; PRB Ex. 11, p. 3).

45. Raymond said that the only way to draw up a list of PCP subscribers was to search through several filing cabinets for PCP service agreements (Tr. 1370-1). He suggested that the lists provided to the engineers were inaccurate because they were prepared in a matter of hours (Tr. 1380). He admitted, however, that the paging terminal could be searched for numbers that had

been activated for pagers on the PCP. Then the numbers could be cross referenced to names by entering them manually into the billing system (Tr. 1402-4).

46. Raymond said Capitol had a maximum of 22 PCP customers at any one time. There may have been hundreds altogether, but there was a lot of churn (Tr. 1416-7). This was because Capitol's service was undependable; customers might not receive their pages (Tr. 1416-7, 1420).

47. Rusty Harrison, the manager of Capitol's Huntington office, is paid a salary plus commission, but had no idea of the revenues from the PCP (Tr. 717-8, 745). Capitol's charge for a PCP customer started at a flat monthly rate for equipment rental and air time of \$9.95 (Tr. 713). Later the charge dropped to \$5.95 (Tr. 746). This compared to about \$30 a month on the RCC system (Tr. 745-6).

Equipment

48. Billy McCallister is a technician employed by Capitol's service company. He installed and maintained the PCP station (Cap. Ex. 21, p. 1). He did not recall the approximate date when he installed the station (Tr. 647-8). All the transmitters he installed were 100 watt output power models (Tr. 661). The transmitter at the Charleston site went on the air first (Tr. 654). He installed a 100 watt Motorola transmitter, capable of digital transmissions, at Charleston (Tr. 661). He observed, "Motorola's the best in the business" (Tr. 661-2). At Huntington he had a GE transmitter, which was analog only, not capable of

digital (Tr. 662). Initially he installed a GE transmitter at Charleston, but changed it for the Motorola transmitter at some point (Tr. 662). He couldn't remember when (Tr. 663). He also changed the crystals on a lot of voice pagers to 152.48 MHz (Tr. 656-7, 664). They were Motorola pagers and very reliable (Tr. 664). The new crystals cost \$15 or \$20 apiece, he said (Tr. 659-60).

49. Capitol went into the PCP business at a very low cost (Tr. 919). The two GE transmitters were borrowed from Calvin Basham (Cap. Ex. 1, p. 11).

50. Capitol's PCP station was licensed to operate with 350 watts output power (Cap. Ex. 15, pp. 1, 3, 5). The FCC engineers checked the actual output power of the two transmitters and found it to be roughly 100 watts at Charleston and 76 watts at Huntington (PRB Ex. 3, p. 5; Tr. 126, 258). That is, the Huntington transmitter's actual output power was less than even its nominal capability (Tr. 141). The low power of the transmitters has a direct effect on how far their transmissions go and how strong they are when received (Tr. 126).

51. Peters explained that because of the terrain, more than one transmitter might be required to cover Charleston (Cap. Ex. 23, p. 10). Capitol's RCC has more than one site to cover Charleston (Tr. 1248-9). According to Raymond, the RCC has four sites to cover Charleston, Huntington and the area in between (Tr. 1335). Capitol's PCP had one site each at Charleston and Huntington (Cap. Ex. 15, pp. 1, 3, 5; Tr. 1248, 1336). Peters'

opinion was that from the one PCP site the majority of Charleston would have good coverage, although some suburban coverage would be inhibited (Tr. 1260). Raymond agreed, saying that they called the PCP a local system, and to him, local was the downtown area (Tr. 1297).

52. The Commission's engineers found the wiring associated with the PCP station at the transmitter sites to be untidy or hazardous (PRB Ex. 3, p. 5; Tr. 130, 181-2, 258). This was in sharp contrast to what they routinely see, and the PCP equipment jumped out as being in a different condition than other equipment at the site (Tr. 182).

Other Instances of Interference

53. In the fall of 1990 Raymond Bobbitt was investigating a problem on 152.480 MHz and noticed some traffic on the frequency that was identical to the traffic on 152.510 MHz, Capitol's RCC frequency (Tr. 467-8). He listened on two receivers and it sounded like stereo (Tr. 467). He could hear the exact same cadence and sequence of traffic on both channels, the RCC and the PCP channel, virtually simultaneously (Tr. 467). Although the traffic was digital and he couldn't decode the content of the messages, it was obvious to him that it was the same traffic (Tr. 468). There is no reason to transmit the same message on more than one paging frequency (Tr. 301, 324, 326, 368, 496-7).

54. The retransmissions caused interference to RAM. Customers in the Charleston area complained they weren't getting their pages during this period (Tr. 487). The retransmissions

would occur when RAM transmitters were on the air so two transmitters would go off at once and the paging receivers could not determine which signal was meant for them and therefore wouldn't go off (Tr. 487). Bobbitt said he didn't know exactly how long it went on because he did not monitor the channel 24 hours a day, but it was days or weeks (Tr. 488). His staff monitored the channel for hours and hours and hours (Tr. 488).

55. Dale Capehart also observed the simultaneous transmissions in November 1990 on 152.480 MHz, the PCP channel, and 152.510 MHz, Capitol's RCC channel (Tr. 284-5, 306-7, 360-1). He took two scanners, one set to 152.480 MHz and the other, to 152.510 MHz and held one at each side of his head (Tr. 284). It sounded like stereo. The transmissions were exactly the same (Tr. 284).

56. Robert Moyer recalled that in November 1990 RAM was experiencing delay in transmissions on 152.480 MHz (Tr. 74). He had reports that his paging system was not delivering the pages to the customers (Tr. 76). He found that the same traffic was being transmitted on Capitol's RCC frequency, 152.510 MHz, and on the shared PCP frequency, 152.480 MHz by listening to two scanners, one tuned to 152.480 MHz and the other, to 152.510 MHz (Tr. 74-6). Exactly what was coming out on 152.510 was coming out on 152.480 (Tr. 75). Also, he recalled calling Mike Raymond's Capitol pager number and hearing his message come out over both channels (Tr. 79).

57. In July 1991 RAM employees monitored a sequence of four

two tone pages that took up about 25 seconds and were transmitted once a minute and included Capitol's call sign; they went on for days at time (Tr. 290, 319, 489-90). The tones delayed RAM's pages (Tr. 489-90, 606). RAM complained to the FCC (Cap. Ex. 19; Tr. 320). The tones stopped for good after the FCC engineers arrived in Charleston (Tr. 290-1, 320).

58. In 1992, Capehart said, Ram employees again heard digital transmissions other than RAM's on 152.480 MHz (Tr. 321). Also, they ran into a problem. A pager of a RAM customer would go off when no one had called the number to set it off (Tr. 291, 321). A RAM employee investigated the false paging problem and found that the false pages on the PCP frequency had been transmitted a few minutes previously on Capitol's RCC frequency, 152.510 MHz (Tr. 291). RAM's 152.480 MHz customer's pager had the same cap code as Capitol's 152.510 MHz customer's pager, thus setting off the RAM pager when the Capitol page was retransmitted on 152.480 MHz (Tr. 291-2). First it was one pager receiving false pages, but then they found more pagers with the problem (Tr. 325). They were getting more complaints from customers (Tr. 325). Additionally the amount of the RCC traffic on 152.480 MHz made it difficult for RAM to get its pages out (Tr. 325).

59. Luke Blatt has been employed by American Mobile Phone since August 1993 (Tr. 372). Prior to that he was employed by RAM as technical service manager (Tr. 372). In August 1992 he performed tests using two Hark verifiers (Tr. 374). A Hark verifier decodes digital pages "into English" and displays them

on a monitor and will print them on a printer (Tr. 374).¹³ He connected the Hark verifiers to receivers, one tuned to 152.510 MHz, and the other, to 152.480 MHz (Tr. 374). He found that some pages that were going out on 152.510 MHz were going out a short time later on 152.480 MHz, same cap code, same message (Tr. 374). He noted a Morse code ID on the 152.480 MHz transmissions and found it was Capitol's (Tr. 375).

60. Blatt also used the Hark verifiers on the two frequencies on October 28, 1992, and printed the output (PRB Exs. 16, 17; Tr. 376-7). The pages on 152.480 MHz are for the most part duplicated from those on 152.510 MHz within a short time (PRB Exs. 16, 17, passim; Tr. 502). Peters' opinion was that the retransmissions from 152.510 MHz caused delay or the potential for delay in use of 152.480 MHz (Tr. 1267-8).

61. Blatt repeated the monitoring every two or three weeks thereafter, with the same results, but did not recall exact dates (Tr. 378-9, 410-1). If he knew he was going to be in Charleston, he would take the Hark verifiers and set them up to verify that there was still a problem (Tr. 381).

62. Blatt explained how the selective retransmission could be done by chaining subscriber numbers from the RCC channel to the same number on the PCP channel in the paging terminal (Tr. 425-6, 451-2). The chaining could only be done within the same paging terminal. It would not be possible for a different

¹³ The manufacturer introduced the Hark verifier in March 1991, according to Bobbitt (Tr. 502, 4).

system's paging terminal to chain Capitol's 152.510 MHz pages to the same numbers on a different channel (Tr. 452). A paging company can only chain pages of its own customers through its own paging terminal (Tr. 455).

63. Bobbitt agreed that there was only one place where you could have separated some of Capitol's traffic, at Capitol's paging terminal (Tr. 474). Once a page went out over the air, there was no way to pick out one digital page. Digital paging traffic sounds like a continuous stream of noise. It would be virtually impossible for someone in the time frame of a minute to receive some data, splice it up a bit and then retransmit it (Tr. 474). But that's what a terminal does very well, taking information coming in on telephone lines and assimilating batches of traffic so they go out efficiently over the air (Tr. 475). Bobbitt noted that the difference in time when the pages went out on each channel could be a function of Capitol's control network and terminal (Tr. 498). The pages were on separate channels and there were several variables that could apply to the difference in time (Tr. 498-9). For example, the two channels could have been buffered and managed at different times. The size of the batches of pages that the terminal was programmed to accumulate could account for the delay, and the system might have been waiting for a clear channel when RAM was on the air (Tr. 498-9).

Capitol's Reaction to the Complaints of Interference

64. Arthur Peters is Capitol's engineering consultant (Cap. Ex. 23, p. 4). Peters said, "I know the people at Capitol run

scared of the FCC all the time, and this is my own personal knowledge because they call me up...." (Tr. 1092). He said, "in the past where they have suspected that something might not be up to FCC standards or in compliance or something, they would call me and say what do I do?" (Tr. 1116). They never called him about the retransmission problem or any of the interference complaints (Tr. 1245). They never discussed with him any complaints of interference while they were operating the station. He didn't even know they had a PCP (Tr. 1249). They never discussed whether they should have a wireline connection with him (Tr. 1249-50).

65. Although aware of the interference complaints, Raymond never set up a system to check for interference or to check the functioning of Capitol's inhibitor (Tr. 1348). He said, "All this was referred to Mr. McCallister. Mr. McCallister routinely checks everything" (Tr. 1340). Raymond was aware of the complaint about the 1992 digital retransmissions as a result of the Commission's response to a Freedom of Information Act (FOIA) request in late 1992 (Tr. 1017, 1414-5). He never tried to determine the source of the retransmissions, dismissing the idea with the statement that he wouldn't know the proper way of determining the source (Tr. 1407).

66. Raymond's interpretation of the requirement to cooperate to resolve interference problems was to complain to the FCC (Tr. 1020-1). Raymond did not even bother to reply to a March 19, 1991, letter from RAM suggesting that they reduce the

possibility of interference by connecting their paging terminals by wireline (Cap. Ex. 13; Tr. 1021-2).

Capitol's Explanation of the Interference

67. Generally, from 1990 to the present, Capitol has denied causing any interference (Cap. Ex. 1, pp. 22-4; Cap. Ex. 11, pp. 2-3; PRB Ex. 13, pp. 11-2;¹⁴ Tr. 814, 1308-9). Capitol has maintained that the tones that the FCC engineers monitored in August 1991 and that RAM had observed earlier in July 1991 were legitimate tests (PRB Ex. 11, pp. 1-3;¹⁵ Tr. 1311-7, 1418-20). When asked to explain the fact that the FCC engineers observed Capitol go on the air while RAM was still on, Raymond disclaimed licensee responsibility, saying "if [the FCC engineers] couldn't figure it out... don't expect me to figure it out" (Tr. 1340).

68. In November 1990, RAM complained that Capitol was causing interference by simultaneous retransmission of its pages on its 152.510 RCC frequency. Capitol's December 4, 1990, response, sent to the Commission, included Raymond's December 4, 1990, statement executed under penalty of perjury. Raymond denied that Capitol retransmitted its RCC pages on 152.480 MHz November 15-18, 1990, or otherwise caused interference to RAM (Cap. Ex. 11, pp. 2-3). He suggested that the FCC should

¹⁴ As noted supra, PRB Ex. 13, pp. 11-14 is Raymond's September 29, 1992, statement under penalty of perjury attached to Capitol's September 30, 1992, response to the Commission's July 30, 1992, NAL.

¹⁵ As noted supra, PRB Ex. 11 is Raymond's June 17, 1992, statement under penalty of perjury that is Capitol's response to the Commission's May 19, 1992, request for information pursuant to Section 308(b) of the Communications Act.

investigate the occurrence, theorizing that it was staged by RAM (Cap. Ex. 11, p. 2). Three years later, in his January 18, 1994, written direct testimony, Raymond newly recollected that the PCP station was not even operating then (Cap. Ex. 1, p. 22).

69. Capitol's consultant, Peters, theorized that the retransmission could be the result of intermodulation, in which two signals mix and produce a signal on a third frequency (Tr. 1095-9). Intermodulation is easy to find with "non-space age techniques" (Tr. 1098). FCC engineer Walker questioned the intermodulation explanation, stating that typically with intermodulation you would hear some distortion and likely more than one signal (Tr. 1458, 1482-4).

70. Mike Raymond's opinion was that the 1992 retransmissions were sabotage by someone who accessed Capitol's terminal by phone or walked in the back door and entered commands into the terminal directly (Tr. 815-8). Raymond explained, step by step, what the saboteur would do to enter commands to chain selected pager numbers from the RCC channel to the PCP channel in the terminal (Tr. 990-1010). He acknowledged that he made no reference to sabotage in his written direct testimony and did not tell the FCC engineers about it at the inspection. He claimed, however, he had thought of sabotage for quite awhile, after just about every complaint (Cap. Ex. 1; Tr. 988-9). The first time he mentioned it to the Commission was at the hearing (Tr. 990). Raymond acknowledged that PCP equipment in the office had a light that would flash when pages were being transmitted (Tr. 1008-9).

Capitol did not have many customers so the transmission light did not flash much (Tr. 1009). If the chaining occurred, he would have been alerted by a lot of flashing, but he never saw that, he said (Tr. 1010).

71. Raymond was vague about when he knew about RAM's 1992 complaint of retransmissions. He would have seen RAM's complaint among materials Capitol received in response to a FOIA request in late 1992 (Tr. 1016-7, 1414-5).

72. Peters' theory, however, involves a third transmitter. Theoretically, someone would take Capitol's 152.510 MHz signal off the air with a Hark verifier and, using a PC to pick out some of the pages, a small paging terminal and a small transmitter, retransmit them (Tr. 117-8).

73. The interference stopped for good when Capitol went off the air in September 1993, a few months before Capitol actually surrendered¹⁶ its authority to operate (Tr. 97, 367, 370). According to Moyer, "We haven't had a problem since" (Tr. 97).

Conclusions of Law

1. RAM and Capitol are competitors in the paging business, competing for the same group of customers. RAM's PCP paging station, which it started in 1989, offered competition to Capitol's established RCC paging business in Charleston and Huntington. Capitol then obtained its own PCP station on the same frequency as RAM's, 152.480 MHz.

¹⁶ See Memorandum Opinion and Order, FCC 93M-763, released Dec. 22, 1993.

2. The record in this case shows that Capitol used its PCP station, not as a business to serve customers, but to transmit willful and destructive interference to RAM on the shared channel. Capitol made a minimal investment in inadequate equipment, had almost no customers and engaged in endless "testing." Capitol's motive was to disrupt RAM's business in the hopes of attracting customers to its competing RCC service. Additionally Capitol made misrepresentations and displayed a lack of candor to conceal its illicit business plan. It attempted to cover up the facts that the PCP was not a real business and that the "testing" was a disguise for interference.

August 1991 Interference

3. RAM made a series of complaints to the Commission that Capitol was causing interference to its pages. In, inter alia, statements to the Commission executed under penalty of perjury dated December 4, 1990, June 17, 1992, and September 29, 1992, Capitol has denied any wrongdoing and made countercharges against RAM. In August 1991, FCC engineers traveled to Charleston. During the week of August 12, 1991, they monitored 152.480 MHz and inspected Capitol's station.

4. RAM was transmitting paging messages and Capitol was transmitting a series of tones, which Capitol claimed were tests. The tone sequence comprised 20 seconds and was repeated every minute. At times Capitol's tones would commence when RAM was still on the air transmitting paging messages. The engineers heard the tones whenever they turned on the radio for the four

days they were in the area, whether morning, noon or night, until their inspection of Capitol's station. The tones originated from the autotest feature of Capitol's paging terminal, which was running around the clock without being turned off during the days they were there, even at times when it was inconceivable that anyone was receiving the tests. The engineers had never heard anything like this duration of "testing" in their many years of experience. The tones ceased while they were inspecting Capitol's station and were not heard again.

5. The first person the engineers encountered at the inspection was Dan Stone, President and owner of Capitol.¹⁷ He made statements to them concerning the PCP's customers and the testing and may have been involved in disabling the testing. Stone was present in Washington to appear as a rebuttal witness for Capitol concerning a phone conversation with RAM. When informed by the Presiding Judge that he would likely permit PRB to examine Stone on other matters on which he had material evidence in order to make a complete record, Capitol decided to forego his testimony.¹⁸ Capitol must bear the consequences of failing to introduce his evidence. The Review Board has held:

where a potential witness is available and appears to have testimony relevant to the case which is not cumulative, and where the relationship with one of the parties is such that the witness would ordinarily be expected to favor that party, the failure to produce the witness gives rise to an inference that the

¹⁷ The Presiding Judge did not grant PRB's request to have Stone produced (Tr. 43-6, 1011, 1039-58).

¹⁸ This is reflected at Tr. 1011-2, 1436.

witness's testimony would have been unfavorable.
McCormick on Evidence (2d Ed., 1972), Sec. 272, at pp.
656-7.

Lee Optical and Associated Companies Retirement and Pension Trust Fund, 2 FCC Rcd 5480, 5486 (Rev. Bd. 1987), citing WNST Radio, Inc., 70 FCC 2d 1036, 1041 (Rev. Bd. 1978).

6. Capitol was not able to identify anyone receiving the test tones when the engineers inspected the station or at any time since. Capitol's manager, Mike Raymond, admitted he never required anyone to monitor tests at a particular time. His theory that sales people might receive tests after work was a mere supposition that was supported by no direct evidence and would not explain testing during the workday. The tests were to three pagers and thus could not have been for the Greenup County Rescue Squad which Capitol said required group call for 10-15 pagers.

7. Capitol never identified any real purpose for the tests. Dan Stone, Capitol's president and owner, told the engineers at the inspection the testing was for a link frequency. When the validity of this claim was questioned, he changed his story to testing for coverage. Raymond repeatedly refused to be pinned down to any specific purpose, reiterating that testing was for the whole "pie" of dependability, range, building penetration, links, individual customers, etc., and never for one piece of the pie. The findings demonstrate and it is concluded that Stone lied to the Commission engineers.

8. Harrison's claim that he routinely had the autotest

turned on to test coverage on his drive home from Huntington to Charleston does not explain why the engineers heard the tones whenever they turned on the radio for four days. Also, such a test could not have been for a legitimate purpose. Capitol's RCC has four transmitters to cover Charleston, Huntington and the area between. The PCP has one low power transmitter each at Charleston and Huntington. In the opinion of Capitol's expert, Peters, the 100 watt Charleston transmitter would cover most of Charleston but not the suburbs. The Huntington transmitter was only 76 watts. It would be unreasonable to assume that Capitol could provide coverage between the two cities with this equipment. The only reason to "test" for such coverage would be to occupy air time. The low power of the Huntington transmitter is an additional reason why the tests as observed by the engineers or at any other time could not have been bona fide tests for the Greenup County Rescue squad, which is located 10 to 15 miles from Huntington.

9. The autotest feature could be set to send tests between one and 99 minutes, and it was set for tests every minute, thus occupying the most air time. The tone duration was set to "4," the maximum. The test feature was set to activate a chain of three pagers, the first one twice and the other two once each, so that each test took 20 seconds of every minute to complete. Capitol could not identify a customer for whom it was testing a chain of three pagers, nor could it explain why it would be necessary to test chaining for a customer for more than a short

time.

10. Raymond's explanation that chaining three pagers was efficient because three people in different areas could receive the test at once is ludicrous in view of Capitol's inability to identify even one person receiving a test. His explanation concerning the repetition of the first page in the chain is not cogent. He explained it by saying that sometimes the message does not come through clearly so repetition is helpful. With the tests there was no message. A person receiving the test would only need to hear the pager beep, so no repetition is necessary. Additionally, the engineers found that the three pagers could be reliably activated with shorter tones, consuming only seven seconds of each minute. Again, the use of three paging numbers, the repetition, and the longer tones served to consume the most air time.

11. Capitol's tests also violated Section 90.405(a)(3) of the Rules, which requires licensees to keep tests to a minimum and to employ every measure to avoid harmful interference. Capitol affirmatively admitted this violation.

12. The engineers found that Capitol's Morse code identification (ID) was transmitted at too slow a rate: at 7 words per minute (wpm), instead of the 20-25 wpm required by Section 90.425(b)(2) of the Rules. Capitol admitted this violation as well and acknowledged that it continued for almost a year after the inspection, until after Capitol received a July 30, 1992, NAL specifying the violation. The additional time

consumed by the slow ID added to the delay and congestion on the frequency caused by the tones.

13. The engineers observed Capitol transmitting willful interference in violation of Section 333¹⁹ of the Communications Act and Section 90.403(e)²⁰ of the Commission's Rules. First, they observed instances of Capitol commencing to transmit tones while RAM was still on the air. Second, the "testing," which occupied 20 seconds every minute whenever the engineers listened to the frequency for a period of four days, and for which no purpose or individual receiving the tests was ever identified, was interference within the meaning of Part 90 of the Commission's Rules applicable to private land mobile licensees.²¹ Capitol does not dispute that it engaged in excessive testing and both FCC engineer Walker and Capitol's engineering consultant Peters agreed that excessive testing is itself harmful interference. The Review Board has held that monopolizing a frequency for prolonged periods with disregard to others who have

¹⁹ Section 333 provides: "No person shall willfully or maliciously interfere with or cause interference to any radio communications of any station licensed or authorized by or under this Act or operated by the United States Government."

²⁰ Section 403(e) provides: "Licensees shall take reasonable precautions to avoid causing harmful interference. This includes monitoring the transmitting frequency for communications in progress and such other measures as may be necessary to minimize the potential for causing interference."

²¹ Section 90.7 of the Commission's Rules defines harmful interference: "For the purposes of resolving conflicts between stations operating under this part, any emission, radiation, or induction which specifically degrades, obstructs, or interrupts the service provided by such stations."

a right to use the frequency is willful interference. Henry C. Armstrong, III, 92 FCC 2d 485, 489 (Rev. Bd. 1983). Indeed, the fact that the tests suddenly stopped during the inspection and were not heard again shows Capitol's guilty knowledge of their impropriety.

14. Capitol is not the first licensee to conceive of a plan to transmit interference under cover of "testing." See Henry C. Armstrong, III, 92 FCC 2d 491 (I.D. 1982), aff'd 92 FCC 2d 485 (Rev. Bd. 1983) and Gary W. Kerr, 91 FCC 2d 110 (I.D. 1982), aff'd, 91 FCC 2d 107 (Rev. Bd. 1982) for examples of licenses that were revoked for willful interference under the guise of "testing."

15. The history of complaints and problems between RAM and Capitol belies any claim that Capitol's interference was inadvertent or unintentional. The fact that the conduct was not accidental is sufficient to support the conclusion that it was willful. Midwest Radio-Television, Inc., 45 FCC 1137, 1141 (1963).

16. Capitol's interference violations alone, as observed by FCC engineers, warrant revocation of all its licenses and imposition of the \$20,000 forfeiture²² proposed in the July 30, 1992, Notice of Apparent Liability (PRB Ex. 12). The Commission has held that even a single instance of misconduct may be the

²² Capitol introduced no evidence pertaining to the downward adjustment criteria specified in the Policy Statement on Standards for Assessing Forfeitures, 6 FCC Rcd 4695 (1991), recon., 57 FR 24986 (June 14, 1992). Accordingly, this forfeiture amount should remain at \$20,000.

basis for license revocation if the misconduct involved is sufficiently clear. Raymond C. Standring, 68 FCC 2d 1021, 1024 (1978). The Commission has said, "Malicious interference in any radio service is a very serious matter." Harold R. Claypoole, 95 FCC 2d 331, 335 (1983). Capitol's other violations, of Sections 90.405(a)(3) and 90.425(b)(2) of the Rules, make the case against it even stronger and emphasize the willfulness of its interference. There is no valid purpose that could be served by Capitol's excessive testing or its Morse code speed violation. They were merely methods of tying up the frequency as much as possible and causing interference to its co-channel licensee who might attempt to use it legitimately. See Henry C. Armstrong, III, 92 FCC 2d 485, 489 (Rev. Bd. 1983).

17. The record contains the suggestion by Capitol that the real problem was RAM, not Capitol. Assuming for the sake of argument that RAM was interfering with Capitol, this would not justify Capitol's conduct. In Jonathan McFadden, 75 FCC 2d 212, 214 (Rev. Bd. 1979), the Review Board stated, "the Commission cannot tolerate the use of vigilante tactics..." noting that one who uses such tactics becomes part of the problem and aggravates the situation. Accord, James W. Smith, 102 FCC 2d 258, 260 (Rev. Bd. 1985), aff'd, 1 FCC Rcd 594 (1986). Indeed, typically in interference cases the respondent has suggested that his actions were justified because of perceived wrongdoing by others, yet his intentional interference has been found to warrant revocation. Kenneth L. Gilbert, 92 FCC 2d 130 (I.D. 1982), aff'd, 92 FCC 2d

126 (Rev. Bd. 1982); Henry C. Armstrong, III, 92 FCC 2d 491, 501 (I.D. 1982), aff'd, 92 FCC 2d 485 (Rev. Bd. 1982); and Gary W. Kerr, 91 FCC 2d 107, 109 (Rev. Bd. 1982).

Misrepresentation and Lack of Candor

18. Capitol showed a lack of candor and made misrepresentations to the Commission. Its motive was to hide the fact that its PCP station was a cover for causing interference to a competitor, not a legitimate business, and to conceal its interference under the guise of testing.

19. Capitol obtained and used its PCP license for the purpose of causing harmful interference to RAM rather than for the purpose of running a PCP business. The facts in evidence compel the conclusion that Capitol's PCP operation was not a bona fide business.

20. At the time of the inspection, almost a year after Capitol's PCP license was granted, it had two or three customers with one pager each. Harrison, whose customers they were and whose compensation was partly commission, did not even know the revenues of the PCP. Raymond admitted Capitol went into the PCP operation at very low cost, with borrowed transmitters. The revenue from three customers after one year could not begin to recover even the small investment Capitol made in buying crystals and paying McCallister to install transmitters and recrystal pagers.

21. At the inspection the engineers were given conflicting stories about the identity and number of Capitol's PCP customers.

Dan Stone, Capitol's president and owner, told them Marshall University was one of the PCP's largest customers. Subsequently during the inspection they were given written customer lists indicating three to five customers with one pager each. Marshall University was not among them. Capitol's failure to produce Stone when he was available gives rise to an inference that his testimony concerning this inconsistency would have been unfavorable and would have strengthened the conclusion that Capitol made misrepresentations concerning the extent of its customers.

22. In its June 17, 1992, response to a 308(b) letter, Capitol said it had two customers at the time of the inspection. Only one of the customers, J.J. Smith Painting, was a constant among the written lists. Since there were so few customers, it strains credulity to believe that Capitol could not identify them all accurately and its failure to do so shows a lack of candor on its part.

23. Raymond's attempt to explain the inconsistencies by saying it was necessary to search through several filing cabinets to produce the customer list given to the engineers is untruthful. As he admitted, the paging terminal could be searched for PCP subscriber numbers and the numbers manually cross referenced with the billing system. With so few customers, that would have taken a very short time.

24. Not only did Capitol spend very little on the PCP station, its equipment was inadequate, showing its lack of intent

to serve PCP customers. Its RCC station has four transmitter sites to serve Charleston and Huntington, but the PCP station had only two. More telling is the low power of its two transmitters, which operated at 100 and 76 watts output power, respectively, although licensed for 350 watts. The installation was sloppy and haphazard as well. The two low power transmitters guaranteed a restricted coverage area and undependable reception of pages. For purposes of interference, however, a low power transmitter is sufficient, according to Peters.

25. Raymond's contention that he could not retain customers because of his undependable service, which he blamed on RAM, is ludicrous in view of the obvious explanation that pages were not being received because they were being transmitted at 76 watts instead of 350 watts. In sum, it must be concluded that Capitol's PCP operation was not a real business and it attempted to conceal this by misrepresentation and lack of candor concerning its customers and revenues.

26. Capitol's misrepresentation and lack of candor concerning testing started at the inspection. When the engineers inquired about the tones they observed, Dan Stone told them they were range testing for a new control link frequency. When the engineers questioned the validity of this, Stone said the testing was to determine coverage of the paging system and affirmed that there was someone in the field to receive the tests. This statement was false. Again, Capitol's failure to produce Stone when he was available gives rise to the inference that his